

Excavating the Local Wisdom of Farmer Community in Order to Support Organic Farming Technology Based on Local Resources in Rejang Lebong District of Bengkulu

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ABSTRACT

This research aimed to (1) know the local wisdom of farmer society in the Rejang Lebong district; (2) know the local wisdom role of farmer society in Rejang Lebong district in supporting organic farming technology; (3) know how to preserve the existing local wisdom of farmer society in Rejang Lebong district. Research was conducted in Rejang Lebong District, for more than 10 months starting from February 2015. The selection of study location was conducted intentionally with a specific purpose (purposive sampling) and the sampling technique used snowball sampling method. Data was obtained through a questionnaire to the respondents and direct observation of field conditions. Data were tabulated and analyzed descriptively. The results showed that there are local wisdom in the form of rituals and non rituals. Local wisdom in the form of rituals is usually led by a handler who is very proficient reading the magic formula, but it has been largely abandoned because of the absence of the handler who could led the rituals procession. Whereas local wisdom without ritual is still performed because it contains the principle of expediency, togetherness, love and manners. Whatever form of local wisdom in Rejang Lebong, either in the form of ritual or not, both supported the implementation of organic farming technology.

Key words: local wisdom, organic farming, and sustainable agriculture

INTRODUCTION

Nowadays, the application of green revolution technologies impact on the death of the farmer wisdom and disrupted the environmental balance. Consequently, farming communities began to advocate the organic farming techniques, namely agricultural system that works with the natural systems that exist in nature (Winnet, 2011).

Actually forefather fhad applied the prganic farming technology. Further knowledge and experience in this field are derived hereditarily to their grandchildren and used as guidance in behavior. It is known as "local wisdom" that is local ideas that are wise, full of wisdom, implanted valuable and followed by the citizens when dealing with the environment and its contents (Nasruddin, 2011).

Lately, moral values contained in the local wisdom had eroded so has led to a moral crisis that is threatening the sustainability of the environment. Unwittingly or not in the end we had left a heavy burden for future generations, such as environmental damage. The awareness of the environment decreasing had uttered agricultural cultivation methods which are more environmentally friendly and utilize local resources where farming was carried out.

Based on the problem above, it is proper to restore the environment to its original balance azaz so as not deprive future generations. One of the way is revive the local wisdom, including local wisdom possessed forefather of farmer society in Rejang Lebong district.

Research purposes were to know the local wisdom of farmer society in the Rejang Lebong district, to know the local wisdom role of farmer society in Rejang Lebong district in supporting organic farming technology, and to know how to preserve the existing local wisdom of farmer society in Rejang Lebong district.

MATERIALS AND METHOD

Population and Sample

Population in this research consisted of farmer society who lived in Rejang Lebong district, while sample which are used in spreading questionnaire or interview to farmer society which spread in South of Curup, North of Curup, East of Curup, Selupu Rejang, Bermani Ulu, Bermani Ulu Raya. The reason of choosing those district is because they are central areas of agriculture and society which farmers are always in contact with the natural resources and of environmental. Technique of sampling which is used is snowball sampling where giving questionnaires to first responders are selected according to the required criteria, then the second respondent is taken from the first respondent information, and so on (Marzuki, 2005).

Analysis and Interpretation of Data

Qualitative data which were collected would be interpreted with triangulation method, that was comparing and integrating some theories in a knowledge field and cross the knowledge field, especially population field, sociology, anthropology. Whereas quantitative data which were collected and tabulated, then analyzed with descriptive statistical methods.

RESULT AND DISCUSSION

Generally farming local wisdom which applied by farmer society in Rejang Lebong district was Rejang local wisdom that was known as “Seang Seei Local Wisdom” which consisted as follows.

Field Opening

Usually the field that was choosed to be opened should be considered well because it was the first step that determined the success of farming. Forefather always choosed the field which are not near with tall tree, far from shrubs, not near with spring because it feared could contaminate and magical soul that inhabit there could be angry. In order to make field opening run smoothly it was necessary to follow the handler and prepare meniken (offerings).

Manufacture of Cottage and Land Preparation

Before the manufacture of the cottage, Rejang society make a long road and short road first. The position of long road should divide the land into two parts of equal area and should not be affected by the shadow of bamboo plants, while the short road should perpendicular to long road. Next the cottage is made in the side of short road which are near to penei, it was the ritual procession place. The ritual procession in that place needed to be done in order to avoid all the problems, such as pests and human diseases.

Preparation of the Seeds

The seeds that were choosen to be planted should come from the seeds that were saved for six to twelve months, because if the seeds were saved less from those time would yield little. Those rice seeds was put in small baskets from storage to sifted, cleaned and soaked in coconut water. At the sifting time Rejang society read, “The rice, we would plant you in this farming field, please give your yield by your spirit so we could spend our grandchild”. Next the rice seed were dried first so that the pores opened and fungi during the storage could be lost.

Planting

Rejang society planted the seeds started by handler planting by the handler at the penei while reading the spell, where in there made three planting hole which each planted 9 seed. From here, they usually could predict the success or failure of their farming later, such as: (1) If in the manufacture of 3 holes appeared 4 holes so it sign their successful harvest; (2) If in the manufacture of 3 holes still appeared 3 holes so it sign their less harvest; (3) If in the manufacture of 3 holes appeared 2 holes so it sign their failed harvest. After the handler done the planting, next would be continued by field owner and helped by local society worked together.

Handling

The handling that was done by Rejang society in farming could covering supernatural through feast or not, such as following:

a. Fertilization

Table 1. Materials used by Rejang society for fertilization

| No | Fertilization Material | Way of Implementation |
|----|--------------------------|---|
| 1 | Straws | Straws were rounded and soaked in water. After one week the position of rounded straws were rotated, where the straw that under were rotated upward. It did repeatedly until the straw decomposes, then it was placed around the rice fields. |
| 2 | The rice bran | Fertilizers which come from leaves skin were mixed with kolang kaling, put in the ground and buried for 2 months. Next, it was mixed with salt and littered in the planting holes as much as the coconut shell. |
| 3 | Leather of kolang kaling | Fertilizers which come from leaves skin were mixed with kolang kaling, put in the ground and buried for 2 months. Next, it was mixed with salt and littered in the planting holes as much as the coconut shell. |
| 4 | Disturber plant (weeds) | The weeds that had been removed manually were burned, then the result of burning strewn on agricultural land. |

Source: Research Result (2015)

b. Pest and Disease Control

Table 2. Pest control method implemented by the forefather of Rejang society

| No | Material | Befenit | Way of Implementation |
|----|---|--|--|
| 1 | Sour bamboo water | To control the walang sangit (an animal that has piercing smell) | Watered to all parts of plant |
| 2 | Camphor | To control pig | Clamped in bamboo and placed on the edge of the fields |
| 3 | Sea sand | To control leafhopper | The sea sand prayed by the handler and strewn on agricultural fields. |
| 4 | 4 slice of black taro 4 slices of black chicken eggs 1 plate of black sticky rice 4 slices of black sticky rice lemang made by using small bamboo | Control pig | Those materials were placed in a rectangular woven bamboo, then held the ritual by the handler |
| 5 | Tuba water | Control caterpillar and leaf hopper | Tuba finely ground to take water, then watered in rice plants that were attacked by pests. For seeds could be soaked with water tuba. For example chili seeds. |

Source: Research Result (2015)

Table 3. Pest control method implemented by the forefather of Rejang society

| No | Material | Benefit | Way of Implementation |
|----|--|---|--|
| 1 | Cengkol Human urine that was born breach | Control rat | Mixed the pounding of cengkol and human urine that was born breach, next saved for a week and watered in all part of farming fields. |
| 2 | Completed sirih Walang sangit (an animal that has piercing smell) | Control the walang sangit (animal that has piercing smell) | Water of human sirih was put in bamboo Catch seven of walang sangit (animal that has piercing smell) and put into the bamboo which has filled water of sirih. Next it was prayed by handler and released back. |
| 3 | Five fruits of sambu flowers | Control the walang sangit (animal that has piercing smell) | Sambu fruits were prayed and placed on the corner of the field. |
| 4 | Human hair | Control the rat | The hair were burned and clipped on the corner of fields and burned in the evening. |
| 5 | Mangosteen leaves | Control the aphids and walang sangit (animal that has piercing smell) | The leaves were smoked and placed around the fields. |
| 6 | Water of shrimp | Control the leafhopper | The rags were soaked in the water of shrimp the clipped on the bamboo and placed around the farming field. |
| 7 | Leafhopper Walang sangit (an animal that has piercing smell) | Control the leafhopper and walang sangit (animal that has piercing smell) | Catch two from the edge and last one so the total was seven. Then prayed by handler during three days by wearing black clothes. Pay intent by a beronang (a thing that usually used to measure the rice) of rice. |

Source: Research Result (2015)

Table 4. Control method implemented by the forefather of Rejang society

| No | Material | Benefit | Way of Implementation |
|----|------------------------------------|---|---|
| a. | Buffalo skin that has been cleaned | Control the rat | All of materials were prayed by handler and strewn around the farming field before sunset |
| b. | Banana leaf cigarette + tobacco | | |
| | Crab | Control leafhopper and walang sangit (animal that has piercing smell) | The crab was clipped on the bamboo and placed around the field. |
| a. | Lard | Control the pig | Lard + oil for curling hair were mixed then smeared on yarn. Furthermore, the yarn is placed circling in the middle of the field. |
| b. | Oil for curling hair | | |

Source: Research Result (2015)

Table 5. Diseases control method implemented by the forefather of Rejang society

| No | Material | Benefit | Way of Implementation |
|----|--|-------------------------------|---|
| 1 | Ripe areca leaves Mangosteen leaves | Leaf rice yellowing | Ripe areca leaves and mangosteen leaves were clipped on bamboo and placed in the middle of the field. |
| 2 | 1 takea (box from banana leaf) of white porridge 1 takea of yellow porridge A glass of water Seven of ripe sirih (betel nut + gambier + lime betel + areca) Three leaf cigarette | Control the yellowing disease | All of materials were put into the tray, then do keduri. |

Source: Research Result (2015)

Harvesting and Post-harvest Processing

Harvesting was done when the rice had been yellowing or aged six months. In this time, there was a binding procession of rice in penei done by the handler. One day after the binding of rice harvesting was done in penei by the handler and the yields hung on bamboo and placed on the edge of land. The next harvesting was done by the owner helped by the local society worked together. Harvesting was done from the edge of rice fields until it reached to the penei using sickles. Harvesting usually last for days and the daily implementation should be preceded by the handler and the yields should still be hung on bamboo.

Next, society saved the yields in the granary that had been prepared. So the yield would not break ate by pests, Rejang society usually hung the yield that was done by the handler on top of granary. Besides, rice damaging could be avoid by giving sesajen (offerings) to all of farming tools, such as sickles, hoes, machetes, etc where all of those were placed in the rattan tray.

Based on the analysis that was done toward the field data obtained an inference that is still applied local wisdom Seang Seei in the Rejang society possible because of the operation of fundamental principles still work, such as:

Expediency principle

Explore and turn on the local wisdom of the Rejang Lebong district allow us to minimize environmental damage resulting from the use of chemicals and encourage the implementation of organic farming which emphasizes the use of natural materials and increase recycling process.

Togetherness principle

Explore and turn on the local wisdom of Seang Seei mean that reviving the tradition mutual cooperation which is the Rejang society forefather that began to fade with the times. The implementation of mutual cooperation in activities shown to ease the burden on farmers, for example, manpower needs in the planting and harvesting.

Love and religion principle

Willing to sacrifice time, energy and thought in farming activities in Rejang society is a form of wisdom that comes from the philosophy of humanism (affection). With a sense of affection between them will foster a sense of unity so that there is a feeling of camaraderie.

Manner principle

Rejang societies who are still adhere to the tradition there are many manners that need to be followed, including taboos when dealing with biotic and abiotic environment. All believed by them associated with the emergence of rice spirit, such as sincerity of rice plants to thrive and produce maximum yields.

CONCLUSION

- 1) Local wisdom of Seang Seei is owned by Rejang society
- 2) There are local wisdom of Seang Seei in the form of rituals and non rituals.

- 3) Local wisdom of Seang Seei has been largely abandoned because of lack of human resources (handler) that can lead the procession rituals. While local knowledge without the accompaniment of mantra still be carried out because it contains the principle of expediency, togetherness, love and religion, and manners.
- 4) Local wisdom of Seang Seei either ritual or non ritual have the same aim, that is to save the environment.
- 5) Local wisdom of Seang Seei accordance with the principles of organic farming, namely: use natural materials in implementing agricultural activities.

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